REMARKS

Applicant has reviewed MPEP 608.01(b), along with other sections of the MPEP and is unable to find any requirement for the definition of an acronym. The abstract should be short and concise and provide a description that would be understandable to one skilled in the art, and may be useful for purposes of searching. As IIR filter is readily understood by those skilled in the art its definition would be unnecessary. Furthermore, Applicant has in fact defined the acronym in the first paragraph on the detailed description for the sake of clarity. Despite Applicants understanding that there is no requirement to define IIR in the abstract, in the interest of further prosecution, Applicant has amended the abstract as requested by the Examiner.

Rejection under §101

Claims 1-4 have been rejected as being directed to unpatentable subject matter under 35 U.S.C. §101. The rejection states that the claims recite a method/apparatus for performing a mathematical function, and that for claims to be statutory they must include a practical application with concrete, useful and tangible result.

The claims are directed to a reconstruction filter, which may, for example, be implemented using hardware circuitry. Many types of circuitry may be said to behave according to a mathematical function, a resistor (V=IR), and a central processing unit (CPU) is often composed of combinations of NAND gates that calculate the result of a logical operation. And yet, both analog and digital electronic circuits have been considered patentable subject matter for several decades. Software is also considered patentable subject matter in the United States.

As quoted by the United States Supreme Court "Congress intended § 101 to extend to 'anything under the sun that is made by man.'" *State Street Bank & Trust v. Signature Financial Group* 47 USPQ2d 1596, 1600 (1998); citing *Diamond v. Chakrabarty*. 206 USPQ 193 (1980)).

As the Supreme Court held, Congress chose the expansive language of 35 U.S.C. § 101 so as to include "anything under the sun that is made by man." *Diamond v. Chakrabarty*, 447 U.S. 303, 308-09, 206 USPQ 193, 197 (1980). 35 U.S.C. § 101 provides that new, and useful process, and any new and useful improvement thereof are patentable. Claims 1 – 4 are directed to such new and useful apparatus/processes, and improvements thereof. "The subject matter courts have found to be outside of, or exceptions to, the four statutory categories of invention is limited to abstract ideas, laws of nature and natural phenomena." *Interim Guidelines*, page 13. Claims 1 – 4 are clearly not related to laws of nature or natural phenomena, as they relate to a reconstruction filter for providing a more efficient reconstruction filter. Applicant contends that claims 1 – 4 are not abstract ideas either. Rather, claims 1 – 4 are directed to methods employing abstract ideas, to perform a real-world function, which may be patentable subject matter. *Interim Guidelines*, page 17.

MPEP 2107.02 provides that "In most cases, an applicant's assertion of utility creates a presumption of utility that will be sufficient to satisfy the utility requirement of 35 U.S.C 101." The Applicant would like to point out that the claims and the specification make clear to one of ordinary skill in the art that the claims relate to a reconstruction filter, which is useful for use in, for example, a video waveform monitor. The utility associated with employing a video waveform monitor should be clear to anyone who relies on these signals to distribute, or receive video images.

Applicant would like to point out that while some language in the Interim Guidelines seems to suggest that the claim itself must provide for a useful result, the claim in State Street Bank did not include the steps of being relied upon by regulatory authorities or the step of being used in subsequent trades, even though these were mentioned as the "useful, concrete and tangible"

result related to the subject matter claimed. *State Street Bank & Trust v. Signature Financial Group*, 149 Fed 3d 1368, 1373 47 USPQ2d 1596, 1600 (Fed. Cir. 1998). Furthermore, even though *State Street* did not require the utility to be provided in the claim, in the present case Claim1 clearly provides that it is directed to producing a reconstruction filtered output, which is based upon an input signal, for example a video input signal. Accordingly, claims 1 through 4 are directed to a patentable new, and useful apparatus/process. Applicant respectfully requests withdrawl of the rejection, and allowance of claims 1 through 4.

Rejection under §102

Claims 1-4 have been rejected as being anticipated by Deerfield (US Pat. 3,370,292) under 35 U.S.C. §102(b).

35 U.S.C. § 102(b) provides that "A person shall be entitled to a patent unless (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States. Since a person is entitled to a patent unless proper grounds for a rejection are provided, the initial burden rests on the Examiner to provide a proper rejection. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegall Bros. v. Union Oil Co. of California,* 814 F2d 628, 631 (Fed. Cir. 1987) (See MPEP 2131). Furthermore, "anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claims." *Lindemann, Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984).

Among other elements the rejection of claims 1-4 fails to provide for combining the first and second filter outputs and the signal to produce a reconstruction filter output. In addition, the rejection fails to address the second infinite impulse response filter having as an input a reverse

version of the signal delayed by one sample. Furthermore, the rejection fails to provide support for the notion that just because a value is the result of a feedback loop via ADDER that is inherently an IIR filter. Even assuming this were the case, it is not clear that the elements have been arranged as required by claims 1-4. Accordingly Applicant respectfully requests allowance of claims 1-4.

Applicant respectfully requests the allowance of claims 1-4 and further requests that this application be passed on to issuance.

Respectfully submitted,

Kevin M. Ferguson

By: /Matthew D. Rabdau/

Matthew D. Rabdau
Reg. No. 43,026
(503) 627-5068 (Voice)
(503) 627-7119 (Fax)

December 31, 2007
Tektronix, Inc.
P.O. Box 500
Delivery Station 50-LAW
Beaverton, OR 97077